

2019-20 Proposed Concentrator Requirements

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CIP Code	Program	Course Code	Course Name	Course Code	Course Name
		First Course Selection (Select One)			Second Course Selection (Select One)
Agriculture, Food, and Natural Resources					
010205	Agricultural Mechanics and Technology	5660 5692	Agricultural Mechanics and Technology Biosystems Mechanics and Engineering	5610 5611 5621	Agricultural Power Mechanics Agricultural Structural Mechanics Equipment Operations and Maintenance
140301	Biosystems Engineering Technology	5691	Agricultural and Biosystems Science	5692	Biosystems Mechanics and Engineering
030101	Environmental and Natural Resources Management	5626	Environmental and Natural Resources Management	5627 5642 5674	Soil and Water Conservation Forestry Wildlife Management
010601	Horticulture	5650	Introduction to Horticulture	5634 5667 5670 5672 5654 5655	Floriculture Golf Course Technology Landscape Technology Nursery, Greenhouse, and Garden Center Technology Turf and Lawn Management Sports Turf Management
011101	Plant and Animal Systems	5624 5691	Agricultural Science and Technology Agricultural and Biosystems Science	5614 5663 5679 5657 5646 5647 5612 5613 5627 5603	Agricultural Crop Production and Management Aquaculture Equine Science Food Processing Cattle Production Farm Animal Production Small Animal Care Introduction to Veterinary Science Soil and Water Conservation Animal Science

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Architecture and Construction					
460000	Building Construction Cluster	6060	Building Construction Cluster 1	6061	Building Construction Cluster 2
480703	Cabinetmaking	6080	Cabinetmaking 1	6081	Cabinetmaking 2
460201	Carpentry	6091	Carpentry 1	6092	Carpentry 2
460301	Electricity	6287	Electricity 1	6288	Electricity 2
470201	HVAC Technology	6003	HVAC Technology 1	6004	HVAC Technology 2
460101	Masonry	6250	Masonry 1	6251	Masonry 2
460503	Plumbing	6280	Plumbing 1	6281	Plumbing 2
Arts, Audio-Video Technology, and Communications					
151301	Architecture/Mechanical Design	6170 6172	Architecture Design 1 Mechanical Design 1	6171 6173	Architecture Design 2 Mechanical Design 2
500402	Digital Art and Design	6120	Digital Art and Design 1	6121	Digital Art and Design 2
500407	Fashion Design and Apparel Construction	5710	Fashion Design and Apparel Construction 1	5711	Fashion Design and Apparel Construction 2
100301	Graphic Communications	6200	Graphic Communications 1	6201	Graphic Communications 2
500408	Interior Design	5455	Interior Design 1	5456	Interior Design 2
100299	Media Technology	6124	Media Technology 1	6125	Media Technology 2
Business Management and Administration					
520401	Administrative Services	5122	Administrative Support Technology	5020	Integrated Business Applications 1

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521206	Business Information Management	5340	Image Editing	5176	Digital Publication Design
520201	General Management	5001	Accounting 1	5400	Entrepreneurship
521001	Human Resources Management	5093	Fundamentals of Human Resources	5044	Business Law
520204	Operations Management	5150	Virtual Enterprise 1	5151	Virtual Enterprise 2
Education and Training					
131210	Early Childhood Education	5700	Early Childhood Education 1	5701	Early Childhood Education 2
130101	Introduction to Teaching	5703	Introduction to Teaching 1	5704	Introduction to Teaching 2
Finance					
520801	Academy of Finance** A program with a list of prescribed courses.		NA		NA
520301	Accounting	5001	Accounting 1	5005	Accounting 2
520803	Banking Services	5273	Business Finance	5271	Banking Services
520804	Business Finance	5273	Business Finance	5001	Accounting 1
521701	Insurance	5273	Business Finance	5275	Insurance and Risk Management
Government and Public Administration (under development)					
TBD	Governance		TBD		TBD
TBD	Government Management and Administration		TBD		TBD
Health Science					

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260102	Biomedical Sciences (Project Lead the Way)	5580	PLTW-Principles of Biomedical Science	5581	PLTW-Human Body Systems
510999	Emergency Medical Services	5531	Emergency Medical Services 1	5532	Emergency Medical Services 2
510706	Health Informatics (Phasing out)	5505	Health Informatics 1 – Data and Use	5506	Health Informatics 2 – Transforming Data into Information
510000	Health Science	5550	Health Science 1	5551	Health Science 2
511600	Practical Nursing	5550	Health Science 1	5551	Health Science 2
		5531	Emergency Medical Services 1	5532	Emergency Medical Services 2
		5555	Sports Medicine 1	5556	Sports Medicine 2
		5580	PLTW-Principles of Biomedical Sciences	5581	PLTW-Human Body Systems
310505	Sports Medicine	5555	Sports Medicine 1	5556	Sports Medicine 2
Hospitality and Tourism					
520905	Culinary Arts Management	5720	Culinary Arts Management 1	5721 5723	Culinary Arts Management 2 Baking and Pastry
520904	Hospitality and Tourism Management	5478	Introduction to Hospitality and Tourism Management	5473 5475 5474	Lodging Management Event and Entertainment Management Travel and Tourism Management
Human Services/Family and Consumer Sciences					
120402	Barber/Master Hair Care	6158	Barber/Master Hair Care 1	6159 6160	Barber/Master Hair Care 2 Barber/Master Hair Care 3 (see note)
120401	Cosmetology	6150	Cosmetology 1	6151	Cosmetology 2

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				6152	Cosmetology 3 (see note)
120409	Esthetics	6162	Esthetics 1	6163	Esthetics 2
120410	Nail Technology	6154	Nail Technology 1	6155	Nail Technology 2
190101	Family and Consumer Sciences	5820	Family Life Education 1	5821	Family Life Education 2
	Note: Any two of these courses would qualify for concentrator status. The combination can be levels one and two of one course or level one of two different courses that prepares a student to earn an industry or postsecondary recognized credential.	5800 5808 5804 5812 5824 5830 5834 5816 5759	Child Development 1 Family and Consumer Sciences 1 Fashion, Fabric, and Design 1 Financial Fitness 1 Foods and Nutrition 1 Housing and Interiors 1 Human Development: Responsible Life Choices 1 Parenting Education 1 Sports Nutrition 1	5801 5809 5805 5813 5825 5831 5835 5817 5760	Child Development 2 Family and Consumer Sciences 2 Fashion, Fabric, and Design 2 Financial Fitness 2 Foods and Nutrition 2 Housing and Interiors 2 Human Development: Responsible Life Choices 2 Parenting Education 2 Sports Nutrition 2
Information Technology					
151202	Information Support and Services	5320	Computer Repair and Service	5321	Advanced Computer Repair and Service
110901	Networking Systems	5310	Networking Fundamentals	5311	Advanced Networking
110201	Programming and Software Development	5050 5056 5052 5054 5324	Computer Programming 1 Computer Programming with C++ 1 Computer Programming with Java 1 Computer Programming with Visual Basic 1 Database Design and Programming with SQL	5051 5057 5053 5055 5326	Computer Programming 2 Computer Programming with C++ 2 Computer Programming with Java 2 Computer Programming with Visual Basic 2 Database Programming with PL/SQL
110801	Web and Digital Communications	5031	Fundamentals of Web Page Design and Development	5033	Advanced Web Page Design and Development

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Law, Public Safety, Corrections, and Security					
430203	Emergency and Fire Management Services	6514	Firefighter 1	6515	Firefighter 2
430107	Law Enforcement Services	6510	Law Enforcement Services 1	6511	Law Enforcement Services 2
Manufacturing					
470101	Electronics Technology	6133	Electronics Technology 1	6134	Electronics Technology 2
480503	Machine Technology	6230	Machine Technology 1	6231	Machine Technology 2
150613	Integrated Production Technology	6222	Advanced Technology for Design and Production	6223	Systems of Advanced Technology
150404	Mechatronics Integrated Technologies	6210	Mechatronics Integrated Technologies 1	6211	Mechatronics Integrated Technologies 2
480501	Metal Fabrication	6260	Metal Fabrication 1	6261	Metal Fabrication 2
480508	Welding Technology	6340	Welding Technology 1	6341	Welding Technology 2
Marketing					
090903	Marketing Communications	5470 5422	Advertising Digital Media Marketing	5421	Marketing
521401	Marketing Management	5421	Marketing	5431	Marketing Management
521402	Marketing Analytics	5421	Marketing	5423	Marketing Analytics
521802	Merchandising	5421	Marketing	5430	Merchandising
Science, Technology, Engineering, and Mathematics					
150801	Aerospace Engineering Technology	6386	Fundamentals of Aerospace Technology	6387 6050	Advanced Aerospace Technology Principles of Engineering

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				6056	Aerospace Engineering
149999	Clean Energy	6380	Clean Energy Systems	6381	Clean Energy Applications
111003	Computer and Information Systems Security/Information Assurance	5370	Cyber Security Fundamentals	5372	Advanced Cyber Security
110701	Computer Science (Project Lead the Way)	6372	Computer Science Essentials	6377	Computer Science Principles
		6378	Cyber Security (PLTW)	6377	Computer Science Principles
143501	Core Engineering	6370	Core Engineering 1	6371	Core Engineering 2
190501	Food Science	5757	Food Science 1	5758	Food Science 2
110104	Informatics (phasing out)	6891	Computers, Networks and Databases	6892	Design for the Digital World
410000	Innovations in Science and Technology	6140	The Nature of Science and Technology	6141	Core Application of Science and Technology
140101	Pre-Engineering (Project Lead the Way)	6051	Introduction to Engineering Design	6050	Principles of Engineering
Transportation, Distribution, and Logistics					
470603	Automotive Collision Repair Technology	6020	Automotive Collision 1	6021	Automotive Collision 2
470604	Automotive Technology	6030	Automotive Technology 1	6031	Automotive Technology 2
470605	Diesel Engine Technology	6310	Diesel Technology	6311	Diesel Technology 2
520203	Global Logistics & Supply Chain Management	6191	Introduction to Logistics	6192	Functional Areas in Logistics

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470606	Power Equipment Technology	6300	Power Equipment Technology 1	6301	Power Equipment Technology 2

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